

Nurses' Break Compliance in the Ambulatory Environment: Basis for a Strategic Quality Management Plan

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Received: 07 Apr 2026; Received in revised form: 04 May 2026; Accepted: 08 May 2026; Available online: 12 May 2026

Abstract— This study assessed nurses' break compliance in the ambulatory environment as a basis for developing a Strategic Quality Management Plan (SQMP). Specifically, the study determined the weekly and monthly break compliance rates of nurses from July to October 2025, identified trends in break adherence, analyzed the strengths, weaknesses, opportunities, and threats (SWOT) associated with break compliance, and proposed evidence-based strategic interventions to improve workforce well-being and patient safety. The study utilized a quality improvement case study approach conducted at the Sanford Urgent Care Clinic in Fargo, North Dakota, USA. Data were gathered from Sanford API Employee Meal Break Reports, staffing schedules, audit reports, and compliance monitoring records involving Registered Nurses, Licensed Practical Nurses, and Patient Care Technicians assigned to 8-hour and 12-hour shifts. Descriptive statistics, including frequencies, percentages, and monthly averages, were used to analyze compliance trends. Findings revealed that overall weekly break compliance remained low at 45.16%, while monthly compliance rates ranged from 43.47% in July to 52.54% in October 2025, indicating persistent challenges in maintaining uninterrupted mandatory breaks. Results further showed that staffing shortages, high patient volume, workload demands, and organizational culture significantly contributed to break non-compliance. The SWOT analysis highlighted operational strengths and opportunities, while emphasizing threats related to burnout, fatigue, and patient safety. Based on the findings, a Strategic Quality Management Plan was proposed focusing on staggered break scheduling, break nurse implementation, staffing optimization, real-time compliance monitoring, and wellness promotion programs to improve nurses' break adherence and healthcare quality outcomes.

Keywords— Nurses' Break Compliance; Ambulatory Environment; Strategic Quality Management Plan; Workforce Well-being; Patient Safety

I. INTRODUCTION

Nurses are essential to safeguard patient safety, enhance healthcare outcomes, and optimize the efficiency of healthcare systems. The escalating demands of healthcare environments, especially in ambulatory and urgent care settings, persistently subject nurses to overwhelming workloads, weariness, burnout, and diminished well-being (Ahmed & Timmins, 2024). Nurses in numerous healthcare facilities often forgo their required rest

intervals due to staffing shortages, increased patient acuity, workflow disruptions, and operational demands (Seridon, 2025). Despite recognition of rest intervals as vital to worker health and patient safety, adherence to break protocols remains a significant challenge in high-pressure clinical settings worldwide (Squires, 2010; Cortez, 2025).

Ambulatory and urgent care environments are especially susceptible to this issue due to erratic patient volume, constrained personnel flexibility, and

the need for swift patient turnover. Studies have consistently demonstrated that the absence of breaks leads to physical exhaustion, cognitive fatigue, emotional distress, diminished job satisfaction, and a heightened risk of clinical errors among nurses (Alahmadi & Alharbi, 2019; Chae & Choi, 2020). Similarly, Bothma & Roodt (2013) highlighted that insufficient rest opportunities correlate with burnout, intentions to leave, and diminished organizational engagement. The data indicate that nurse break compliance is not solely a personnel issue but also a critical matter for healthcare quality and patient safety.

The World Health Organization highlighted that fatigue and occupational stress among healthcare workers adversely impact workforce sustainability, the quality of healthcare delivery, and patient outcomes. The American Nurses Association emphasized that safeguarded rest periods are crucial for enhancing nurses' physical and mental health while mitigating fatigue-related mistakes. The Agency for Healthcare Research and Quality emphasized that organized personnel support and break systems substantially enhance patient safety and clinical performance. The International Council of Nurses emphasized that supporting workplace policies and conducive work conditions are essential for maintaining nurse productivity and healthcare quality.

The Sanford Urgent Care Clinic in Fargo, North Dakota, USA, accommodates around 150 patients daily in a high-demand ambulatory setting. The clinic operates continuously throughout the week and cares for urgent and emergency patients who need quick nursing attention. Nurses in the unit often struggle to take uninterrupted 30-minute mandatory breaks due to high patient volume, staffing constraints, and ongoing workflow demands. Internal break compliance reports from July to October 2025 indicated that compliance rates frequently fell below 60%, signifying a systemic operational issue impacting personnel well-being and corporate performance. The findings support Nts'upa et al. (2023) observations, indicating that broken non-compliance among nurses is significantly linked to staffing deficiencies and the lack of organized relief mechanisms (Cortez et al., 2025).

Numerous studies have suggested organizational solutions to mitigate missed breaks among nurses. Selmi and Belrhiti (2026) indicated that adopting a "break nurse" paradigm enhanced break adherence and reduced burnout among healthcare professionals. Alahmadi and Alharbi (2019) discovered that assured rest periods markedly improved nurse satisfaction and reduced emotional exhaustion. Moisoglou et al. (2025) underlined the significance of supportive leadership, appropriate staffing distribution, and a work-conducive workplace culture in enhancing nurse recovery and resilience. Notwithstanding these measures, few studies have specifically examined nurses' adherence to break protocols in ambulatory settings from a strategic quality management perspective. Most prior research has focused on hospital inpatient settings, emergency departments, or overall burnout, leaving a lack of localized operational solutions for ambulatory care contexts.

This study aimed to evaluate nurses' adherence to break protocols in the ambulatory setting as a foundation for a Strategic Quality Management Plan (SQMP). The study specifically analyzed weekly and monthly compliance patterns regarding breaks, identified operational obstacles through SWOT analysis, and offered evidence-based management measures to enhance nurses' adherence to uninterrupted necessary breaks. This study's findings may enhance healthcare management by offering data-driven solutions that nurture staff well-being, patient safety, operational efficiency, and quality healthcare delivery in ambulatory care environments.

Objectives of the Study

This study aimed to assess nurses' break compliance in the ambulatory environment as a basis for developing a Strategic Quality Management Plan (SQMP). Specifically, the study sought to determine the level of nurses' break compliance in terms of weekly break compliance and monthly break compliance from July to October 2025. It also aimed to identify the trends in nurses' break compliance rates during the specified period and analyze the strengths, weaknesses, opportunities, and threats (SWOT) associated with nurses' break compliance in the ambulatory environment. Furthermore, the study intended to propose a Strategic Quality Management Plan (SQMP) to improve nurses' break compliance and promote workforce well-being, operational

efficiency, and patient safety in the ambulatory care setting.

II. METHODOLOGY

This study used a quality improvement (QI) case study approach to investigate nurses' adherence to break protocols in a high-demand ambulatory care setting and to formulate a Strategic Quality Management Plan (SQMP) to address identified operational issues. A case study technique was considered suitable as it facilitated a comprehensive examination of a real-world healthcare problem within its authentic clinical setting, incorporating organizational evaluation and evidence-based treatments Brownson et al. (2022). The research was conducted at the Sanford Urgent Care Clinic in Fargo, North Dakota, USA, a 22-bed ambulatory healthcare facility serving over 150 patients daily and operating seven days a week, including holidays. Participants comprised Registered Nurses (RNs), Licensed Practical Nurses (LPNs), and Patient Care Technicians (PCTs) assigned to 8-hour or 12-hour shifts from July to October 2025. The total population sample was utilized, encompassing all scheduled healthcare personnel documented in the Sanford API Employee Meal Break Reports for the break compliance monitoring dataset. The principal data source was the Sanford API Employee Meal Break Report, which recorded whether healthcare professionals effectively completed uninterrupted 30-minute mandatory breaks during each shift. Supporting papers, including charge nurse monitoring sheets, staffing schedules, HR audit reports, and staff self-reporting logs, were employed to corroborate compliance data. Descriptive statistics, such as frequency counts, percentages, and monthly averages, were used to examine patterns in break compliance at the weekly and monthly levels. The study employed the SWOT Analysis Framework to ascertain organizational strengths, weaknesses, opportunities, and threats affecting nurses' break compliance and to inform the creation of the Strategic Quality Management Plan Edwards et al. (2021). The SQMP encompassed treatments including staggered break scheduling, the appointment of break nurses or nurse relievers, real-time monitoring of break adherence, workload redistribution during high-acuity intervals, and the deployment of float nurses to ensure workflow

continuity. These treatments were corroborated by prior research highlighting that organized staffing assistance and safeguarded break systems promote nurse well-being, mitigate burnout, and improve patient safety results (Ayoub et al., 2026; Douglas et al., 2024; Almutairi et al., 2024). The ethical standards of beneficence and non-maleficence were upheld throughout the study. No patient-related information was collected, and all employee data were anonymized and handled with strict confidentiality to safeguard participants' rights and welfare.

III. RESULTS AND DISCUSSION

This section presents, analyzes, and interprets findings on nurses' compliance with mandatory breaks in the ambulatory environment. These findings include observed compliance trends, operational factors affecting uninterrupted breaks, the results of the SWOT analysis, and the proposed Strategic Quality Management Plan (SQMP) to improve nurses' compliance with mandatory breaks.

1. The level of nurses' break compliance in the ambulatory environment

Table 1 presents the compliance with nurses' weekly breaks.

Table 1. Weekly Nurses' Break Compliance

Day	Missed Breaks	Scheduled Nurses	Percentage (%)
Monday	7	10	70.0
Tuesday	7	9	77.8
Wednesday	6	9	66.7
Thursday	5	9	55.6
Friday	5	9	55.6
Saturday	1	8	12.5
Sunday	3	8	37.5

Note: Weekly compliance–45.16% and Weekly non-compliance–54.84%

Table 1 displays compliance with nurses' breaks on a weekly basis in the ambulatory setting. The results indicated that weekly break compliance was 45.16%, while non-compliance accounted for 54.84%, indicating that over half of the scheduled nurses failed to take their requisite 30-minute uninterrupted breaks. Tuesday had the highest rate of missed breaks (77.8%),

followed by Monday (70.0%) and Wednesday (66.7%), indicating that weekdays, characterized by increased patient volume and operational demands, are associated with non-compliance with break protocols. Conversely, Saturday had the lowest percentage (12.5%), potentially linked to a reduced workload and lower patient volume. The results corroborate the research by Gallibot et al. (2026), which highlighted that excessive workload and extended shifts adversely

affect nurses' well-being and opportunities for rest. Neva and Assa (2025) similarly emphasized that a culture of weariness in healthcare environments restricts nurses' capacity to prioritize breaks. Shkoler et al. (2021) linked staffing shortages and overtime to burnout and shorter recovery periods, whereas Choudhury and Saravanan (2026) highlighted that structured break systems enhance compliance and alleviate nursing fatigue.

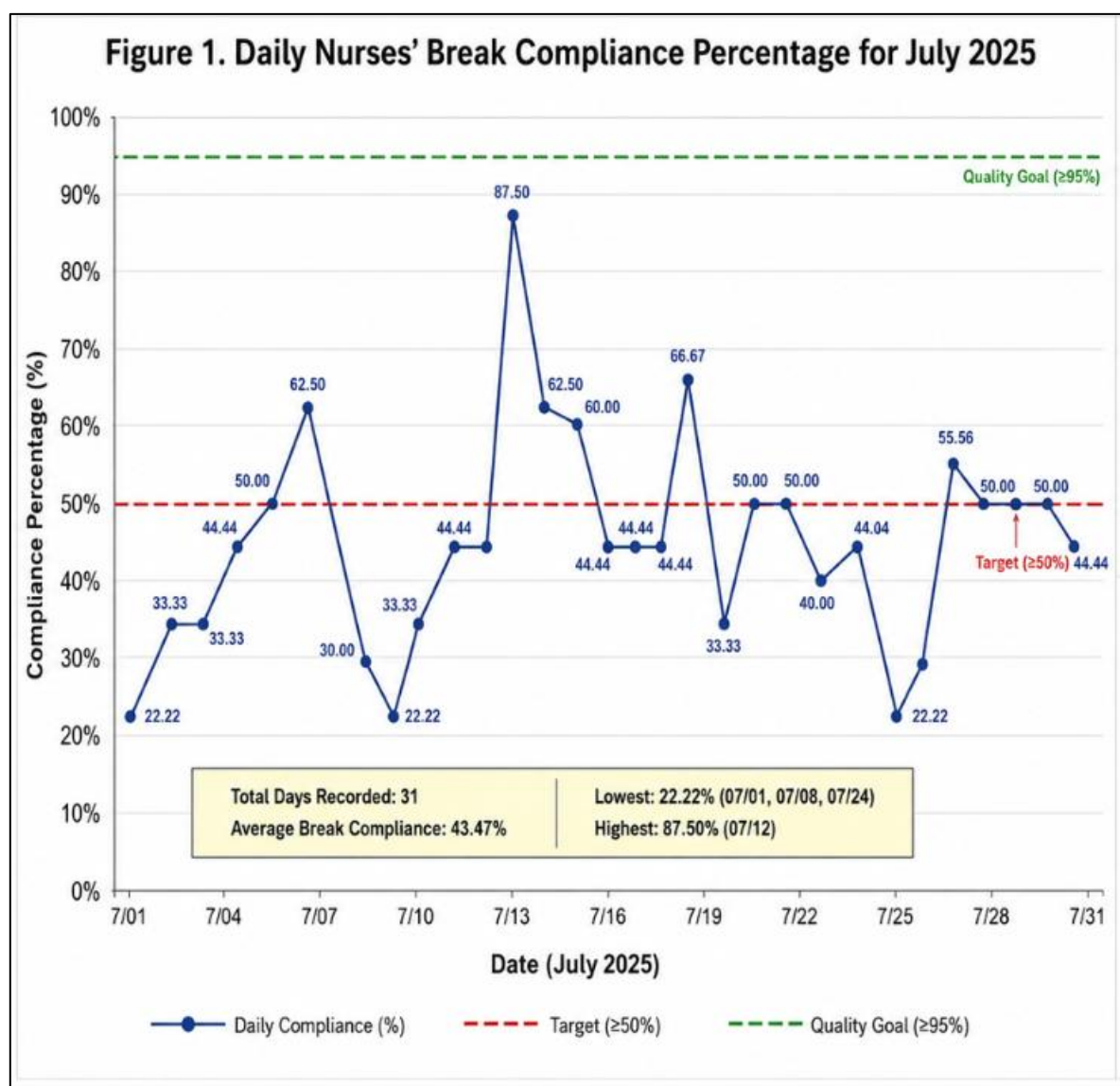


Fig.1. July 2025 Nurse's Break Compliance

Figure 1 shows the daily compliance percentage for nurses' breaks in July 2025. The average compliance rate was 43.47%, indicating that fewer than half of scheduled nurses took their mandatory 30-minute breaks on most days.

Compliance rates fluctuated throughout the month, ranging from a low of 22.22% (July 1, 8, and 24) to a high of 87.50% (July 12). Only 10 out of 31 days (32.3%) met or exceeded the 50% target, and no day approached the quality goal of 95% compliance.

Periods of low compliance (e.g., July 1–2, 7–8, 21–24) suggest the impact of staffing constraints, workload surges, or competing operational demands. Sustained improvement strategies are needed to achieve consistent compliance.

The findings supported Chang and Manojlovich (2023) who noted the importance of severe workload

and staffing shortages resulting in missed breaks and nursing weariness. Likewise, Saleh et al. (2025) found that high patient demand and workplace culture typically hinder nurses from taking uninterrupted breaks and influence well-being, recovery, and patient safety outcomes. Figure 2 shows the August Nurses' Break Compliance.

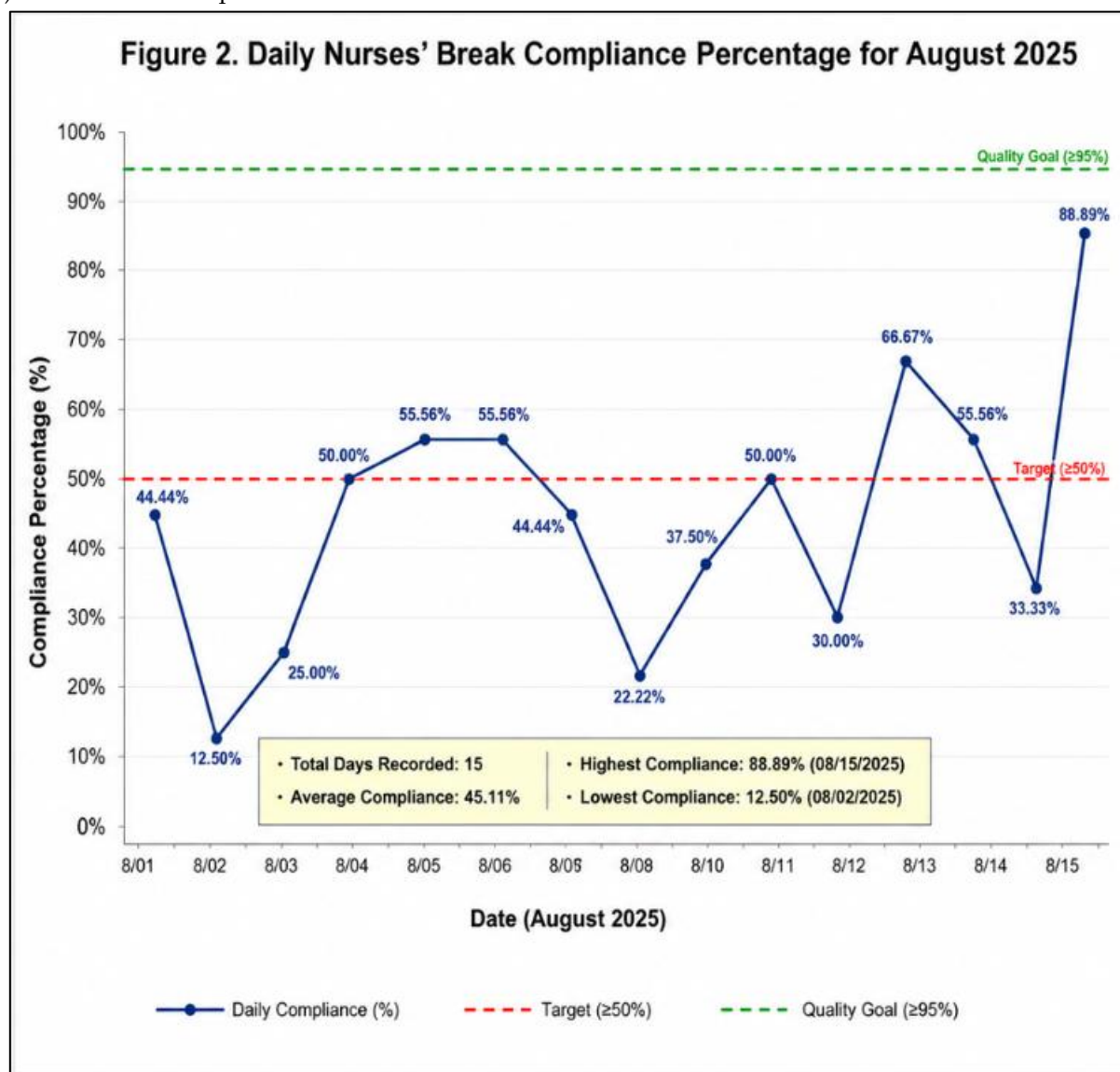


Fig.2. August 2025 Nurses' Break Compliance

Figure 2 presents the daily compliance percentage for nurses' breaks in August 2025. The average compliance rate was 45.11%, indicating that fewer than half of the scheduled nurses consistently took their mandatory 30-minute breaks throughout the month.

Compliance rates fluctuated widely, ranging from a low of 12.50% on August 2 to a high of 88.89% on

August 15. Only 7 out of 15 days (46.7%) met or exceeded the 50% target, and no day approached the quality goal of 95%.

The inconsistent compliance pattern suggests ongoing challenges, including staffing limitations, variable patient volume, and competing operational demands. Sustained, system-level interventions are needed to achieve consistent break compliance.

The findings confirmed Adkins (2018), who highlighted hard workloads and organizational culture as contributing factors to missed nurse breaks and fatigue. Baldwin et al. (2024) also showed that

staffing shortages and long workloads influence nurses' ability to take uninterrupted breaks, consequently lowering their well-being, productivity, and patient safety.

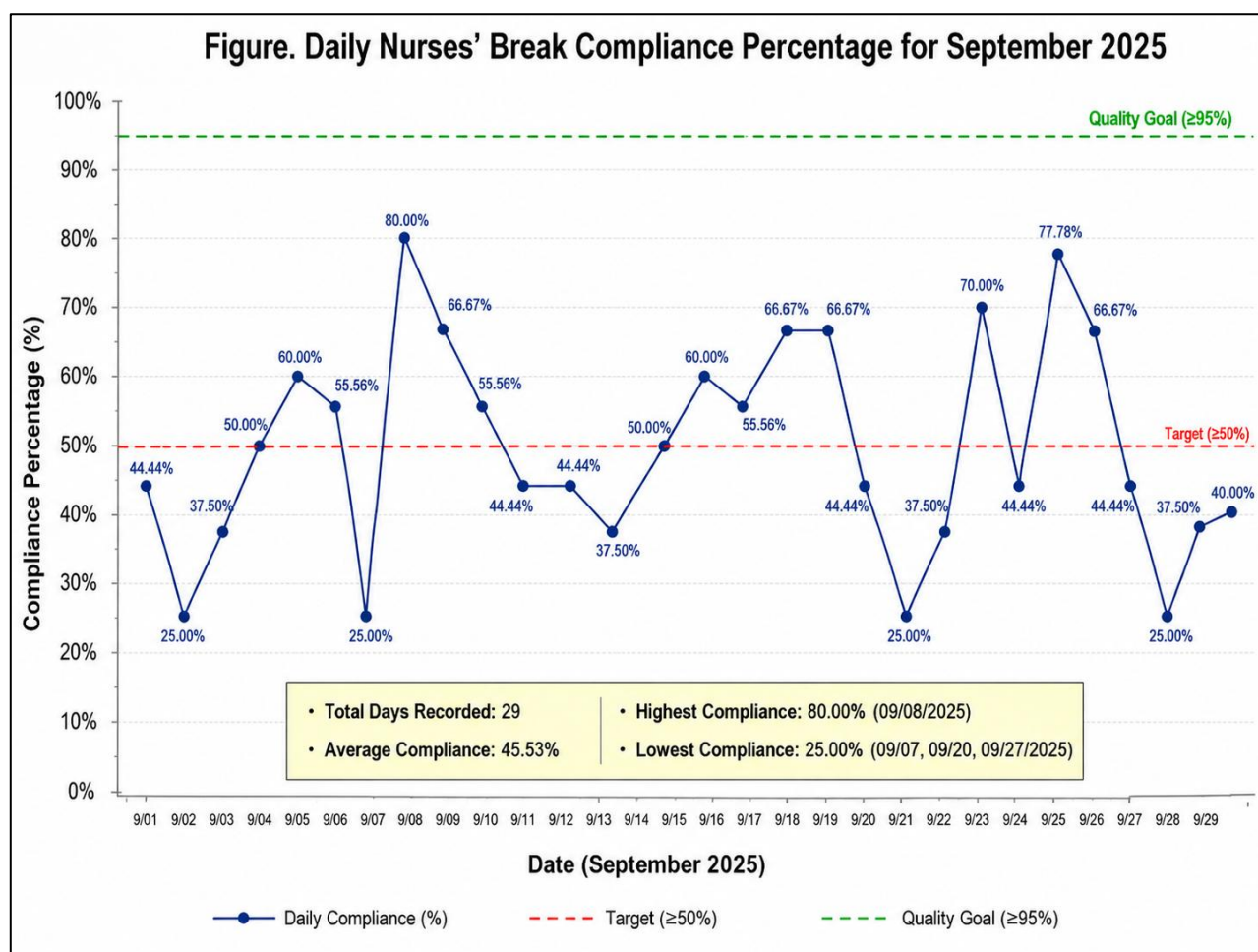


Fig.3. September 2025 Nurses' Break Compliance

Figure 3 illustrates the daily compliance percentage for nurses' breaks in the ambulatory environment in September 2025. The average compliance rate was 45.53%, which remained below the institutional target and far from the 95% quality goal. Compliance rates fluctuated considerably, with the highest rate recorded at 80.00% on September 8 and the lowest at 25.00% on September 7, 20, and 27. The findings suggest inconsistent adherence to scheduled nurse breaks, possibly influenced by staffing shortages, patient workload, and operational demands in ambulatory care settings. According to Rahagia et al.

(2026), insufficient rest periods are a contributing factor in the level of weariness and decreased work effectiveness experienced by healthcare professionals. Regular breaks have been shown to improve both nurses' well-being and patient safety outcomes (Douglas et al., 2024). Similarly, Arefin (2025) found that structured breaks reduce the incidence of clinical errors and burnout among healthcare professionals. Furthermore, Bergström et al. (2015) emphasized that supporting workforce policies improves both compliance and the quality of healthcare services.

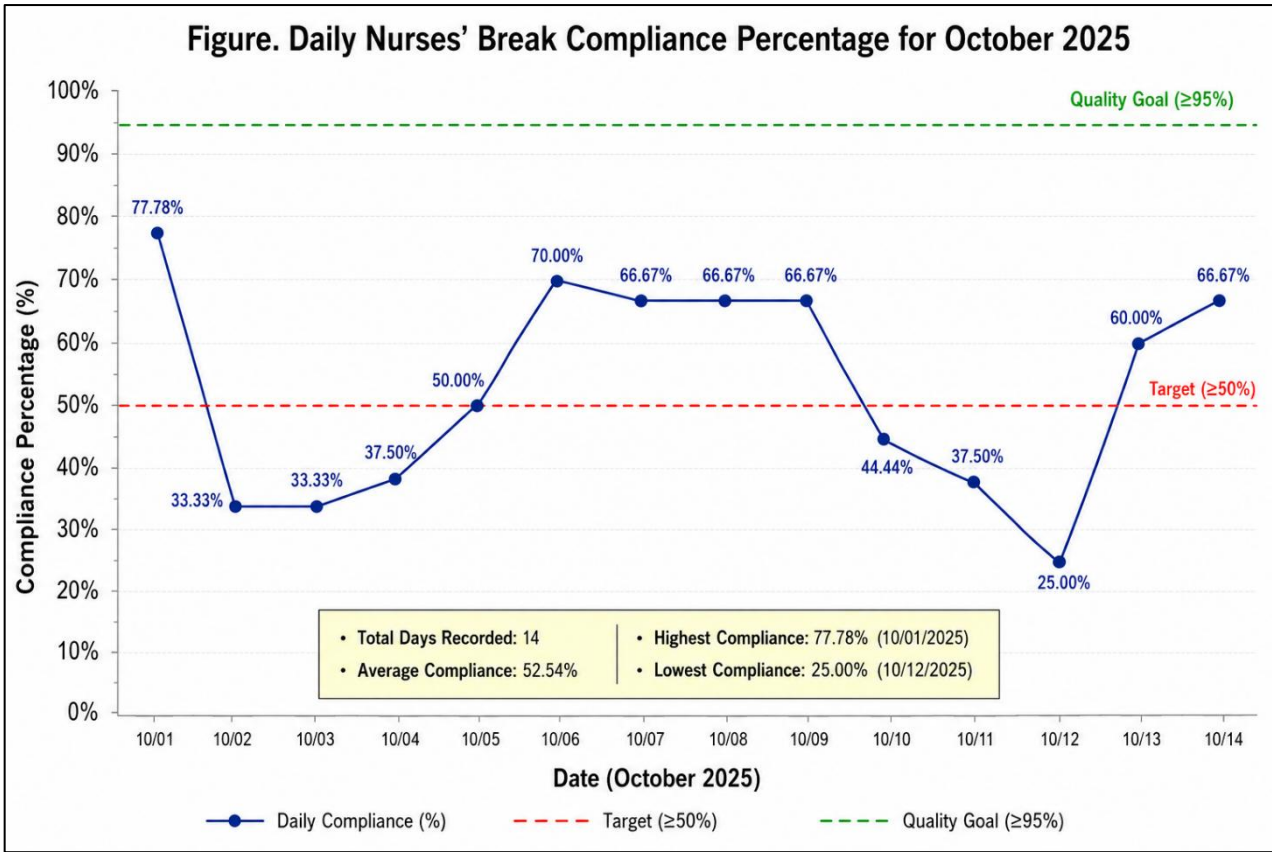


Fig.4.

October 2025 Nurses' Break Compliance

Figure 4 illustrates the daily compliance percentage for nurses' breaks in the ambulatory environment in October 2025. The average compliance rate reached 52.54%, a slight improvement from August (45.11%) and September (45.53%). The highest compliance rate was 77.78% on October 1, while the lowest was 25.00% on October 12. Although several days exceeded the 50% target threshold, the compliance level still remained below the ideal quality goal of 95%, indicating ongoing barriers to consistent break adherence. Variations in compliance may be associated with fluctuating patient volume, staffing inadequacies, and demanding clinical workloads. To reduce fatigue and enhance labor efficiency in healthcare settings, Puddester (2014) asserts that regular rest periods are essential. Studies conducted by Chang and Manojlovich (2023) found that regular breaks for nurses improve patient safety and overall job satisfaction. In a similar vein, Hu et al. (2026) reported that breaks reduce the risk of fatigue and clinical errors. Additionally, Perry et al. (2017) emphasized that supportive staffing practices

improve both the quality of healthcare and the well-being of employers and employees.

2. The Trends in nurses' break compliance rates from July to October 2025.

Table 2 presents the Monthly Nurses' Break Averages.

Table 2. Monthly Nurses' Breaks Averages

Month	Days Recorded	Average Compliance Rate
July	31	43.47%
August	15	45.11%
September	24	45.53%
October	14	52.54%

Table 2 presents the monthly average compliance with nurses' breaks from July to October 2025 in the ambulatory environment. The findings revealed that compliance rates consistently remained below 60%, with July at 43.47%, August at 45.11%, September at 45.53%, and October at 52.54%. Although October reflected modest improvement, the overall results indicate persistent challenges in achieving consistent

nurse break adherence. The trend suggests that workload demands, staffing shortages, and operational pressures may continue to hinder protected rest periods among nurses. According to Dembe et al. (2005), working extended periods without sufficient breaks can lead to fatigue, reduced concentration, and lower healthcare quality. Studies conducted by Li et al. (2023) found that regular nurse breaks improve staff well-being and patient safety outcomes. In a similar vein, Shanafelt et al. (2022)

reported that targeted workforce interventions and rest management help prevent burnout and medical errors. In addition, Alshammari and Ali (2024) emphasized the importance of organizational support and staffing optimization to maintain healthcare workers' productivity and provide quality patient care.

4. Strengths, Weaknesses, Opportunities, and Threats (SWOT) Associated with Nurses' Break Compliance in the Ambulatory Environment



Fig.5. SWOT Analysis Associated with Nurses' Break Compliance in the Ambulatory Environment

The SWOT analysis revealed significant internal and external factors influencing nurses' break compliance in the ambulatory environment (Navarro et al., 2020). Strengths identified included dedication to patient care, adaptability, teamwork, flexibility, and strong clinical competence, indicating that nurses possess professional qualities that support effective healthcare delivery. However, weaknesses such as burnout, fatigue, reduced efficiency, physical health concerns, and job dissatisfaction demonstrated the negative

consequences of inconsistent break-taking practices. Opportunities highlighted the potential to implement break nurse models, optimize staffing, foster a supportive workplace culture, and enhance policies to improve compliance rates. Conversely, threats such as patient safety concerns, worsening nursing shortages, decreased patient satisfaction, and financial implications for healthcare institutions highlight the urgency of intervention. Hesgrove et al. (2024) have determined that weariness among healthcare workers

has a substantial impact on patient safety and the sustainability of the workforce. According to research conducted by Özkan and Uydacı (2020), protected nurse breaks have been shown to boost both morale and the quality of care provided. Additionally, Schreuders et al. (2014) found that strategic staffing interventions reduce the incidence of clinical errors and fatigue in the healthcare industry. Furthermore,

Zajac et al. (2021) emphasized that organizational support and workforce policies contribute to improvements in both the quality of healthcare and employees' well-being.

5. Proposed Strategic Quality Management Plan (SQMP) to Improve Nurses' Break Compliance in the Ambulatory Environment.

Table 3. Proposed Strategic Quality Management Plan (SQMP)

Strategic Goals	SMART Objectives	Strategies/ Activities	Key Performance Indicators (KPIs)	Timeline	Responsible Unit/Person	Means of Verification
Improve nurses' break compliance in the ambulatory environment	Increase nurses' uninterrupted 30-minute break compliance from below 50% to 95% by the last quarter of 2025	Implement mandatory staggered break scheduling per shift	Percentage of nurses able to take uninterrupted breaks	October-December 2025	UC Manager, Charge Nurses	Sanford API Break Reports, Break Logs
Strengthen staffing support during high patient volume	Assign at least 1-2 break nurses or float nurses per shift	Utilize the break nurse/reliever system and redistribute workload during peak hours	Number of shifts with assigned break nurses	Daily Monitoring	Nursing Supervisor, Charge Nurses	Staffing Schedules, Duty Rosters
Enhance monitoring and accountability for break compliance	Conduct weekly compliance audits and feedback sessions	Real-time break tracking and staff compliance reminders	Weekly compliance audit results	Weekly	HR Department, Nurse Managers	Audit Reports, Compliance Monitoring Sheets
Promote a supportive workplace culture for protected breaks	Improve staff awareness regarding the importance of breaks	Conduct orientations, staff meetings, and wellness programs	Attendance and participation in wellness programs	Monthly	Nursing Administration, HR	Attendance Sheets, Evaluation Forms

	and self-care	advocacy programs				
Reduce burnout and improve workforce well-being	Provide a conducive and relaxing break room environment	Renovate and upgrade break rooms with adequate facilities	Staff satisfaction rating regarding break environment	Within 6 months	Hospital Administration	Survey Results, Facility Inspection Reports
Improve patient safety and healthcare quality outcomes	Minimize fatigue-related nursing errors through proper rest periods	Reinforce compliance with labor and patient safety standards	Reduction in reported fatigue-related incidents	Quarterly	Quality Assurance Office	Incident Reports, Performance Evaluations

The proposed Strategic Quality Management Plan (SQMP) was developed based on the identified trends, compliance gaps, and SWOT analysis findings of the study. The plan focused on improving nurses' break compliance through staffing optimization, structured scheduling, real-time monitoring, and organizational support mechanisms. Findings revealed that break compliance consistently remained below the desired quality target, indicating systemic barriers associated with workload, staffing shortages, and workplace culture. Therefore, interventions such as staggered break scheduling, break nurse implementation, workload redistribution, and wellness promotion were included to address operational and human resource concerns (Mina et al., 2021). To prevent fatigue and maintain the quality of healthcare, Denton and Cronin (2006) asserts that adequate rest periods are necessary. Protected breaks have been shown to improve nurses' well-being and patient safety outcomes, according to studies by Aiken et al. (2025). Additionally, McCunn et al. (2020) found that planned staffing interventions reduce the incidence of clinical errors and fatigue in healthcare. In addition, Dahlin et al. (2017) emphasized that supportive workforce policies promote higher levels of employee satisfaction and improved quality of healthcare services (Mina-Aydinan et al., 2025).

IV. CONCLUSION AND RECOMMENDATION

The study determined that nurses' adherence to break protocols in the ambulatory setting continually fell short of the established quality requirement from July to October 2025, highlighting ongoing operational and organizational difficulties in facilitating uninterrupted obligatory breaks for healthcare staff. Research indicated that staffing deficiencies, elevated patient volume, rigorous clinical workloads, and workplace culture substantially impacted low compliance rates. The findings indicated that insufficient adherence to break protocols heightened the risk of weariness, burnout, diminished efficiency, and potential patient safety issues among nurses. Notwithstanding these limitations, the SWOT analysis revealed organizational strengths and opportunities that might facilitate enhancements in break compliance processes. The suggested Strategic Quality Management Plan (SQMP) presents evidence-based interventions that could improve staff well-being, operational efficiency, and patient safety outcomes in ambulatory care environments.

The study suggested implementing the Proposed Strategic Quality Management Plan (SQMP) to Improve Nurses' Break Compliance in the Ambulatory Environment to address missed breaks, weariness, and worker well-being. Healthcare administrators were advised to develop break nurse

or float nurse schemes to ensure nurses had continuous rest. Institutions could also use planned and staggered break scheduling, real-time compliance monitoring, and compliance audits to boost responsibility and compliance. Healthcare firms were also encouraged to foster a supportive workplace culture through wellness initiatives, staff education, upgraded break rooms, and leadership practices that prioritize protected breaks and employee well-being. The SQMP was intended to increase staff efficiency, fatigue-related risks, patient safety, and ambulatory care quality. Future researchers were encouraged to replicate the study in various hospital settings to confirm and broaden its findings.

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